AMENDMENT TO THE CLAIMS

1. (original) A method of treating cardiac arrhythmia, comprising:

producing, by use of a patient actuatable non-implanted activator, an activation signal in response to a patient sensing a perceived cardiac arrhythmic condition;

confirming, by an implantable medical device provided within the patient, that the patient is experiencing an actual cardiac arrhythmic condition;

generating, by the non-implanted activator in communication with the implantable medical device, a perceivable initiating signal instructing the patient or a physician to commence with a drug delivery regimen to treat the actual cardiac arrhythmic condition; and

initiating a pacing regimen to treat the actual cardiac arrhythmic condition.

2. (original) The method of claim 1, wherein the pacing regimen terminates in response to expiration of a predefined timeout period.

3. (original) The method of claim 2, wherein the predefined timeout period is associated with a half-life of a drug of the drug delivery regimen.

4. (original) The method of claim 1, wherein the pacing regimen terminates in response to expiration of a predefined timeout period, the predefined timeout period representing a duration of time of greater than one half-life of a drug of the drug delivery regimen.

5. (original) The method of claim 1, wherein the activation signal is produced by use of the non-implanted activator in response to the patient

sensing the perceived cardiac arrhythmic condition or in response to the implantable medical device sensing the actual cardiac arrhythmic condition.

6. (original) The method of claim 1, wherein initiating the pacing regimen further comprises pacing one or more of the patient's atria and ventricles.

7. (original) The method of claim 1, further comprising initiating electrogram storage in response to the activation signal or the initiating signal.

8. (original) The method of claim 1, wherein initiating the pacing regimen further comprises initiating a pacing mode associated with a reduced risk of cardiac arrhythmia for the drug delivery regimen.

9. (original) The method of claim 1, wherein the drug delivery regimen comprises a plurality of deliverable drugs, and wherein initiating the pacing regimen further comprises initiating a pacing mode associated with a reduced risk of cardiac arrhythmia for a particular deliverable drug of the drug delivery regimen.

10. (original) The method of claim 1, further comprising changing a mode of the pacing regimen in response to an effect of the drug delivery regimen on the patient.

11. (original) The method of claim 1, further comprising changing a mode of the pacing regimen after termination of the actual cardiac arrhythmic condition by delivery of one or both of the pacing regimen and the drug delivery regimen.

12. (original) A method of treating atrial arrhythmia, comprising:

producing, by use of a patient actuatable non-implanted activator, an activation signal in response to a patient sensing a perceived atrial arrhythmic condition;

confirming that the patient is experiencing an actual atrial arrhythmic condition;

generating, by the non-implanted activator, a perceivable initiating signal instructing the patient or a physician to commence with a drug delivery regimen to treat the actual atrial arrhythmic condition; and

initiating a pacing regimen to treat the actual atrial arrhythmic condition, the pacing regimen accounting for presence of a drug delivered to the patient as part of the drug delivery regimen.

13. (original) The method of claim 12, wherein the pacing regimen terminates in response to expiration of a predefined timeout period, the predefined timeout period associated with a half-life of a drug of the drug delivery regimen.

14. (original) The method of claim 12, wherein the pacing regimen terminates in response to expiration of a predefined timeout period, the predefined timeout period representing a duration of time of greater than one half-life of a drug of the drug delivery regimen.

15. (original) The method of claim 12, wherein the pacing regimen terminates in response to expiration of a predefined timeout period, the predefined timeout period representing a period of increased risk of ventricular pro-arrhythmia.

16. (original) The method of claim 12, further comprising initiating electrogram storage in response to the activation signal or the initiating signal.

17. (original) The method of claim 12, wherein initiating the pacing regimen further comprises pacing one or both of the patient's atrium and ventricle.

18. (original) The method of claim 12, wherein the pacing regimen comprises a regimen to treat ventricular pro-arrhythmia.

19. (original) The method of claim 12, wherein initiating the pacing regimen further comprises initiating a pacing mode associated with a reduced risk of ventricular pro-arrhythmia.

20. (original) The method of claim 12, further comprising changing a mode of the pacing regimen in response to an effect of the drug delivery regimen on the patient.

21. (original) The method of claim 12, wherein the drug delivery regimen comprises a plurality of deliverable drugs, the method further comprising changing a mode of the pacing regimen to a mode associated with a reduced risk of ventricular arrhythmia for a particular deliverable drug of the drug delivery regimen.

22. (original) A method of treating cardiac arrhythmia, comprising:

producing, by use of a patient actuatable non-implanted activator, an activation signal in response to sensing a perceived cardiac arrhythmic condition by a patient or an implantable medical device provided within the patient;

confirming, by the implantable medical device, that the patient is experiencing an actual cardiac arrhythmic condition; and

generating, by the non-implanted activator in communication with the implanted medical device, a perceivable initiating signal instructing the patient or a physician to commence with a drug delivery regimen to treat the actual cardiac arrhythmic condition.

23. (original) The method of claim 22, further comprising communicating to the patient a particular drug to administer.

24. (original) The method of claim 22, further comprising communicating to the patient a particular dosage of a drug to administer.

25. (original) The method of claim 22, further comprising communicating to the patient a plurality of reminders to administer a particular drug at specified times.

26. (original) A system for treating cardiac arrhythmia, comprising:

a non-implanted activator actuatable by a patient, the activator comprising a communication unit and producing an activation signal in response to a patient sensing a perceived cardiac arrhythmic condition; and

an implantable medical device, comprising:

communication circuitry for communicating with the non-implanted activator;

an energy detection and delivery system, comprising a lead system, for detecting cardiac signals and delivering energy to the heart in accordance with a pacing regimen; and

a control system, the control system, in response to the activation signal, confirming that the patient is experiencing an actual cardiac arrhythmic condition and generating a confirmation signal, the control system initiating the pacing regimen to treat the actual cardiac arrhythmic condition, and the non-implantable activator generating a perceivable initiating signal instructing the patient or a physician to commence with a drug delivery regimen to treat the actual cardiac arrhythmic condition.

27. (original) The system of claim 26, wherein the control system terminates the pacing regimen in response to expiration of a predefined timeout period.

28. (original) The system of claim 27, wherein the predefined timeout period is associated with a half-life of a drug of the drug delivery regimen.

29. (original) The system of claim 26, wherein the control system terminates the pacing regimen in response to expiration of a predefined timeout period, the predefined timeout period representing a duration of time of at least twice as long as one half-life of a drug of the drug delivery regimen.

30. (original) The system of claim 26, wherein the activation signal is produced by the non-implanted activator in response to the patient sensing the perceived cardiac arrhythmic condition or by the control system in response to detecting the actual cardiac arrhythmic condition.

31. (original) The system of claim 26, wherein the control system initiates electrogram storage in response to the activation signal or the initiating signal.

32. (original) The system of claim 26, wherein the control system initiates a pacing mode associated with a reduced risk of cardiac arrhythmia for the drug delivery regimen.

33. (original) The system of claim 26, wherein the drug delivery regimen comprises a plurality of deliverable drugs, and the control system initiates a pacing mode associated with a reduced risk of cardiac arrhythmia for a particular deliverable drug of the drug delivery regimen.

34. (original) The system of claim 26, wherein the control system changes a mode of the pacing regimen in response to an effect of the drug delivery regimen on the patient.

35. (original) The system of claim 26, wherein the control system changes a mode of the pacing regimen after termination of the actual cardiac arrhythmic condition by delivery of one or both of the pacing regimen and the drug delivery regimen.

36. (original) The system of claim 26, wherein the actual cardiac arrhythmia is an atrial arrhythmic condition, and the control system terminates the pacing regimen in response to expiration of a predefined timeout period, the predefined timeout period representing a period of increased risk of ventricular pro-arrhythmia.

37. (original) The system of claim 26, wherein the actual cardiac arrhythmia is an atrial arrhythmic condition, and the pacing regimen comprises a regimen to treat ventricular pro-arrhythmia.

38. (original) The system of claim 26, wherein the actual cardiac arrhythmia is an atrial arrhythmic condition, and the pacing regimen further comprises initiating a pacing mode associated with a reduced risk of ventricular pro-arrhythmia.

39. (original) The system of claim 26, wherein the actual cardiac arrhythmia is an atrial arrhythmic condition and the drug delivery regimen comprises a plurality of deliverable drugs, the control system changing a mode of the pacing regimen to a mode associated with a reduced risk of ventricular arrhythmia for a particular deliverable drug of the drug delivery regimen.

40. (original) A method of treating an adverse cardiac condition, comprising:

producing, by use of a patient actuatable non-implanted activator, an activation signal in response to a patient sensing a perceived adverse cardiac condition;

confirming, by an implantable medical device provided within the patient, that the patient is experiencing an actual adverse cardiac condition;

generating, by the non-implanted activator in communication with the implantable medical device, a perceivable initiating signal instructing commencement of a drug delivery regimen to treat the actual adverse cardiac condition; and

initiating a safe mode of pacing appropriate for the adverse cardiac condition.

41. (original) The method of claim 40, wherein the safe mode of pacing comprises a pacing mode appropriate for a drug of the drug delivery regimen delivered to the patient.

42. (original) The method of claim 40, wherein the safe mode of pacing terminates in response to expiration of a predefined timeout period.

43. (original) The method of claim 42, wherein the predefined timeout period is associated with a half-life of a drug of the drug delivery regimen.

44. (original) The method of claim 40, wherein the activation signal is produced in response to the patient sensing the perceived adverse cardiac condition or in response to the implantable medical device sensing the actual adverse cardiac condition.

45. (original) The method of claim 40, wherein initiating the safe mode of pacing further comprises pacing a plurality of the patient's atria and ventricles.

46. (original) The method of claim 40, wherein initiating the safe mode of pacing further comprises pacing one or both of the patient's ventricles to improve pumping efficiency of the patient's heart.

47. (currently amended) The method of claim 40, further comprising changing the safe mode of pacing to a subsequent mode of energy delivery ~~pacing~~ in response to an effect of the drug delivery regimen on the patient.

48. (currently amended) The method of claim 47, wherein the subsequent mode of energy delivery ~~pacing~~ comprises a pacing, cardioversion or defibrillation mode.

49. (currently amended) The method of claim 40, further comprising changing the safe mode of pacing to a subsequent mode of energy delivery ~~pacing~~ in response to an effect of the safe mode of pacing on the patient.

50. (currently amended) The method of claim 49, wherein the subsequent mode of energy delivery ~~pacing~~ comprises a pacing, cardioversion or defibrillation mode.

51. (original) The method of claim 40, further comprising changing from the safe mode of pacing to a normal mode of pacing after termination of the actual adverse cardiac condition.

52. (original) The method of claim 40, wherein the adverse cardiac condition comprises an adverse arrhythmic cardiac event.

53. (original) The method of claim 40, wherein the adverse cardiac condition comprises an adverse non-arrhythmic cardiac event.

54. (original) The method of claim 40, wherein the adverse cardiac condition comprises an episode of angina.

55. (original) The method of claim 40, wherein the adverse cardiac condition comprises a heart failure decompensation event.

56. (original) The method of claim 40, wherein the adverse cardiac condition comprises an acute ischemic event.

57. (original) A system for treating an adverse non-arrhythmic cardiac condition, comprising:

a non-implanted activator actuatable by a patient, the activator comprising a communication unit and producing an activation signal in response to a patient sensing a perceived adverse non-arrhythmic cardiac condition; and

an implantable medical device, comprising:

communication circuitry for communicating with the non-implanted activator;

an energy detection and delivery system, comprising a lead system, for detecting cardiac signals and delivering energy to the heart in accordance with a pacing regimen; and

a control system, the control system, in response to the activation signal, confirming that the patient is experiencing an actual adverse non-arrhythmic cardiac condition and generating a confirmation signal, the control system initiating the pacing regimen to treat the actual adverse non-arrhythmic cardiac condition, and the non-implantable activator generating a perceivable initiating signal instructing the patient or a physician to commence

with a drug delivery regimen to treat the actual adverse non-arrhythmic cardiac condition.

58. (original) The system of claim 57, wherein the control system initiates a pacing mode associated with a reduced risk of adverse cardiac activity for the drug delivery regimen.

59. (original) The system of claim 57, wherein the control system initiates a pacing mode to treat an episode of angina.

60. (original) The system of claim 57, wherein the control system initiates a pacing mode to treat a heart failure decompensation event.

61. (original) The system of claim 57, wherein the control system initiates a pacing mode to treat an acute ischemic event.

62. (original) The system of claim 57, wherein the control system initiates a left ventricular pacing mode.

63. (original) The system of claim 57, wherein the control system initiates a bi-ventricular pacing mode.